Neighborhood Mitigation Plan: The Hamlet

The Hamlet Neighborhood Mitigation Plan (NMP) is a cooperative effort between The Hamlet at Castle Pines North Homeowners Association (H-HOA) and South Metro Fire Rescue (SMFR). The Wildfire Mitigation Committee members who developed this document stand committed to implementing its recommendations as well as reviewing it annually and updating it as needed. This NMP assesses the hazards and vulnerabilities of this community and identifies a path for the community to reduce home-ignition risks from wildfires by identifying and prioritizing projects.

Community Description

The Hamlet is a neighborhood of 61 single-family homes within the City of Castle Pines. The homes, which were built between 1987 and 1996, are on parcels of land less than half an acre adjacent to Burggarten Drive or one of the six short cul-de-sacs that branch from that main road.

There is a single commercial structure in the neighborhood, but the "Self Service Booth" as it is called is only 282 square feet and sits at the entrance to the neighborhood. Otherwise, the homes themselves represent the most significant values at risk. According to the Douglas County Assessor's Office website, the combined actual value of these 61 homes, based on 2019 data, was over \$36.2 million. That valuation does not include contents or the value of businesses operated from homes.

Burggarten Drive, the single access route into this neighborhood is gated. SMFR's computer-aided dispatcher system has a code for the gate and each of its emergency apparatus has a Knox Box key for entry.

All but six homes in the neighborhood have fire-resistant roofing. Those other six homes have wood-shake shingles and, therefore, pose a significant risk to The Hamlet and nearby neighborhoods. Exterior walls consist of frame masonry veneer or frame stucco. Wood and composite decks are common.

While there are no livestock in the neighborhood, as required by the Declarations and Covenants, many residents have pets.

Infrastructure

H-HOA homes are connected to a municipal water system maintained by the Castle Pines North Metropolitan District (CPNMD). The water provided to this neighborhood as well as all of the City of Castle Pines originates in non-renewable groundwater in the Arapahoe and Denver Basin aquifers beneath the district. Presently, CPNMD utilizes seven wells to extract water from the aquifers and pump it to its pair of water treatment plants and storage tanks.

Xcel provides electrical power with buried lines and natural gas to the community.

Ecological Context

Topography is one of the key factors that influences wildfire behavior, largely because fire burns faster uphill than downhill. The neighborhood stretches gently uphill from the intersection of Burggarten Drive and Monarch Boulevard. Additionally, several homes are placed on landscaped slopes within the neighborhood.

This neighborhood consists of native ponderosa pines with a native grass and Gambel oak understory. Most homeowners have added vegetation and manicured lawns to their yards. Unfortunately, some of new plat species are poor choices for wildfire-prone ecosystems such as varieties of juniper, piñon pine, Austrian pine and Scotch pine.

Emergency Response

The first-due firefighting resources respond from SMFR Station 36 (421 E. Castle Pines Parkway). There are hydrants in the neighborhood. SMFR meets the requirements of an ISO (Insurance Services Office) Public Protection Classification (PPC) rating of 1.

Law enforcement and emergency management services are provided by the Douglas County Sheriff's Office, which is based in Castle Rock.

Community Values

Community covenants are one window into what a community values. This community values neat and tidy appearances. The landscaping requirements for common areas and private property in The Hamlet, according to the *Declarations and Covenants* and *Rules and Regulations* documents (both updated in February 2019), require that lots be maintained "in a good, neat, attractive and well-kept condition." Additionally, the *Rules and Regulations* requires homeowners to "diligently maintain, cultivate, husband, protect, and preserve all shrubs and trees upon the owner's lot."

Any adjustments to landscaping on private property must be submitted to the H-HOA for registration. However, removal of trees, shrubs or other vegetation for wildfire mitigation is allowed, according to Colorado Revised Statute 38-33.3-106.5 (1)(e), as long as the vegetation removal complies with a written plan for the property created by the local fire district or Colorado State Forest Service office.

H-HOA documents do address other topics related to wildfire safety and home-ignition risks:

- Address numbers must be approved by the Design Review Committee.
- Interior fireplaces must prevent the dispersal of embers.
- All exterior firepits and fireplaces must be fueled by gas.
- Asphalt composite shingles with a 40-year life, Class-A fire resistance, 110-mph wind resistance, and Class-4 hail resistance must be used to replace wood-shake shingle roofing.

Fire History

Although no fires have occurred within this neighborhood, The Hamlet is at-risk for wildfires. Additionally, the neighborhood was threatened by the Cherokee Ranch Fire in October 2003. That wildfire began to the west of the neighborhood when high winds toppled a tree onto utility lines. The 1,000-acre wildfire burned eastward toward what is now the City of Castle Pines but stopped when a cold front brought lower temperatures and higher relative humidity overnight, which helped firefighters contain the blaze.

Community Risk Assessment

The Hamlet is at risk for home ignitions and other impacts from wildfires because of several factors that it shares with other interface neighborhoods in the City of Castle Pines.

- Topography: The Hamlet is on a slope above Monarch Boulevard and a fairway of The Ridge at Castle Pines North Golf Course. Individual homes also sit on slopes added by developers. The slopes could influence wildfire behavior.
- Native Vegetation: Vegetation in the open space and bordering the fairways is either native grasses or mature, dense stands of Gambel oak. The potential for rapid fire spread and large flame lengths is present.
- Home Construction: Six homes have wood-shake shingle roofing. All homes have fire-resistant exterior walls.
- Landscaping: All homes have maintained lawns, but some yards feature flammable vegetation such as junipers near primary structures.
- Access: Access into the neighborhood is limited to the gated entry of Burggarten Drive. The gate has a Knox Box control that is keyed for SMFR use.
- Families: All residences are single-family homes. Most have at least two residents.

Given moderate weather conditions, wildfires can be expected to spread rapidly through the native grasses and occasionally burn vertically into individual trees, which is known as torching, but tree density is insufficient for crown fires in this neighborhood. Flammable landscaping and wood-shake roofing are likely to receive and propagate spot fires from embers.

Hazard Identification and Risk Reduction Priorities

Community risk reduction takes a village; it requires individual actions and collective action to be effective over a longer term. In the interest of planning and accountability, mitigation and preparedness activities were separated into three categories: private property, shared space and zone of influence.

Private Property:

According to covenants, each property owner is responsible for maintaining the private lots' landscaping. Homeowners must share their mitigation plan with the Design Review Committee prior to removing any vegetation as required by state law and local covenant.

Recommendations:

- Remove all juniper species within 30 feet of each structure and replace it with fire-resistant plants from the official Village at Castle Pines list.
- Trim all low-hanging branches (within 6 feet of the ground) from mature ponderosa pine trees. Other pines should be trimmed 10 feet above the ground.
- Trim all branches 6 feet above roofing and away from exterior siding.
- Amend the H-HOA covenants to include guidance regarding landscaping that is more resistant to wildfire ignition and propagation and that reduces the risk of home ignitions.
- SMFR personnel conducted driveway assessments of all properties in August 2019. A summary of those findings is attached as Appendix A.
- Property owners can receive free home wildfire risk assessments from SMFR by contacting <u>Einar.Jensen@southmetro.org</u>.

Shared Space:

Vegetation growing among the homes in the open space or common areas presents a low risk to homeowners. Those tracts of open space cover a total of 2.23 acres.

Tract	Acres
D	1.43
F	0.05
G	0.06
Н	0.1
I	0.28
J	0.14
K	0.17

Recommendations:

• Tract I poses the greatest risk because it supports a dense, continuous grove of Gambel oak and other deciduous shrubs. Unlike the other native shrubs, however, Gambel oak is highly flammable throughout most of the year. The oak in this tract should be thinned vertically and horizontally to reduce the likelihood of fire growth. Thinning oak stands into smaller groves will protect individual groves from fire and disease as

- well as slow fire growth. Thinning oak stands vertically (removing branches and foliage 5-6 feet above the ground) will protect oak canopies from fire spread and limit flame length.
- Amend the H-HOA covenants to include guidance regarding landscaping that is more resistant to wildfire ignition and propagation.

Zone of Influence:

The area surrounding The Hamlet also contributes to the neighborhood's home-ignition risk. Mitigation within this "zone of influence" relies on partnerships and collaboration with other stakeholders to create mutually beneficial solutions to shared challenges.

- North and West: The fairway for Hole 5 and tees for Hole 6 of The Ridge at Castle Pines North are adjacent to the western and northern edges of The Hamlet. While the greens are excellent defensible spaces, several stretches of the property line are blanketed by dense groves of Gambel oak. That oak should be thinned vertically and horizontally.
- Northeast: Hole 4 is adjacent to this edge of the Hamlet. The tee boxes, fairway and green are ideal fuel breaks.
- Southeast and South: Castle Pines North Metro District manages the open space along the neighborhood's southeastern border and at the southern point, but does little in terms of mitigation. Grasses should be mowed within 6 to 8 feet of property lines (depending on the size of the mower's deck) and oak groves should be thinned vertically and horizontally.

Based on those areas and the risk analysis, SMFR offers the following recommendations:

Priority	General Project	Timeline	Guidance
1	Tract I Open Space Mitigation	2020	Consider options for oak and shrub management including goats, mastication, and/or hand-trimming. Thin groves vertically and horizontally.
2	Private Property Mitigation	2019-2020	Replace flammable plants with wildfire-resistant plants, maintain lawns, flower beds
3	Update covenants and rules to address wildfire risk and home ignition risk	2019-2020	

4	Update how addresses are posted	2019-2020	Replace current address numerals with materials that contrast with backgrounds so that they can be read 24/7 regardless of weather.
5	Evacuation Drill	2020	Collaborate with SMFR to practice evacuating the neighborhood.

Additionally, SMFR recommends that the H-HOA host opportunities to educate residents about wildfire risk and preparedness utilizing resources and personnel from SMFR, Colorado State Forest Service, Douglas County and other entities. Those subject matter experts can attend meetings and community events, contribute to newsletters and websites, and conduct property risk assessments when requested by residents.

Appendix A: Results of August 2019 Roadway-based Home Risk Assessments

On August 8 and 9, 2019, South Metro Fire Rescue personnel conducted home wildfire risk assessments of each home in The Hamlet from the vantage point of the road in front of the home. The findings of this process are below.

It is recommended that homeowners contact SMFR for individualized home wildfire risk assessments for more thorough analysis of property risks and possible solutions. Email Einar.Jensen@southmetro.org to set such an appointment.

There are a few tips that apply to most homeowners in The Hamlet:

- Trim branches away from exterior walls to help maintain the integrity of the siding.
- Trim branches above the roofline to create a 6-foot tall vertical gap above roofing free of any branches.
- Remove dead needles and leaves from gutters.
- Remove dead needles and leaves from under decking and porches.
- Post address numbers with 4" tall numerals of a color that contrasts with the background.

Address	Mitigation Suggestion
2 Tauber Court	Remove ornamental pines because they
	are highly flammable.
7 Tauber Drive	Trim the branch beside the home's
	chimney and remove junipers.
8 Tauber Drive	Remove junipers and piñon pine.
10 Röder Gate Lane	Remove tall Pfitzer bush at garage.
12 Röder Gate Lane	Collaborate with resident at 13 to remove
	the highly flammable piñon pine under the
	ponderosa pine. Also remove the juniper
	to the west of the home.
13 Röder Gate Lane	Collaborate with resident at 12 to remove
	the highly flammable piñon pine under the
	ponderosa pine. Also remove the junipers
	to the east of the home and beside the
	garage.
15 Röder Gate Lane	Remove ornamental pines and junipers
	because they are highly flammable.
16 Röder Gate Lane	Remove junipers because they are highly
	flammable.
18 Klingen Gate Court	Remove Pfitzers and junipers under the
	front window.
19 Klingen Gate Court	Remove ornamental pines at corners of
	house and garage.

23 Klingen Gate Court	Remove the non-native pine behind the
	home and all junipers within 30 feet of the home.
26 Klingen Gate Court	Remove junipers along the back of the
20 7711	home.
28 Klingen Gate Court	Remove junipers at the garage.
29 Klingen Gate Court	Remove junipers and the piñon pine.
30 Klingen Gate Court	Remove mugo and piñon pine.
31 Marcus Lane	Replace wood-shake shingle roofing with
	Class-A fire-resistant roof as described in
	The Hamlet's Rules & Regulations. Remove dead aspen tree.
32 Marcus Lane	Replace wood-shake shingle roofing with
32 Marcus Lanc	Class-A fire-resistant roof as described in
	The Hamlet's Rules & Regulations.
33 Marcus Lane	Remove ornamental pines and dwarf
	spruce tree.
34 Marcus Lane	Replace wood-shake shingle roofing with
	Class-A fire-resistant roof as described in
	The Hamlet's Rules & Regulations.
	Remove juniper along the garage.
35 Tilly Lane	Remove ornamental pines along front
	walkway.
36 Tilly Lane	Remove half of the juniper obscuring the
	utility boxes at the corner of the garage.
40 Herrn Lane	Remove ornamental pines.
41 Herrn Lane	Remove ornamental pine.
42 Herrn Lane	Remove ornamental pine and piñon pine.
43 Herrn Lane	Remove all junipers within 30 feet of the
	home. Remove ornamental pines along
	the deck. Collaborate with 44 to remove
44 Herrn Lane	piñon pine between homes.
44 Herrn Lane	Collaborate with 43 to remove piñon pine between homes. Thin oak behind the
	home.
46 Herrn Lane	Replace wood-shake shingle roofing with
40 Herri Lane	Class-A fire-resistant roof as described in
	The Hamlet's Rules & Regulations.
	Remove mugo pine.
47 Herrn Lane	Replace wood-shake shingle roofing with
	Class-A fire-resistant roof as described in
	The Hamlet's Rules & Regulations.
	Remove mugo pine.
48 Herrn Lane	Remove junipers.
49 Old Forge Drive	Remove junipers beside the home.
51 Toppler Court	Remove junipers at the front and back of
	the home.

52 Toppler Court	Remove junipers and ornamental pines at
	the front bay window.
53 Toppler Court	Remove non-native pine along the
	southern wall.
54 Toppler Court	Replace wood-shake shingle roofing with
	Class-A fire-resistant roof as described in
	The Hamlet's Rules & Regulations.
55 Toppler Court	Thin oak at southwest corner of house.
56 Toppler Drive	Collaborate with resident at 57 to remove
	the highly flammable junipers between the
	homes.
57 Toppler Drive	Collaborate with resident at 56 to remove
	the highly flammable junipers between the
	homes. Also remove the juniper at the
	front of the home.
58 Toppler Drive	Remove the ornamental pine trees.
59 Toppler Drive	Remove junipers and ornamental pines.
61 Toppler Drive	Thin Gambel oak behind home.